Amendments to the Specification:

Please replace the last paragraph beginning at page 5 and continuing onto page 6, with the following replacement paragraph:

> One possibility to use the loudness individually perceived in response to selected acoustic signals as a variable for further processing is offered by the method schematically illustrated in Fig. 1 and described for instance by O. Heller in "Auditory Range Audiometry Employing the Categorization Method", Psychological Articles 26, 1985, or by V. Hohmann in "Dynamics Compression for Hearing Aids, Psychoacoustical Fundamentals and Algorithms", thesis at the Univ. of Göttingen, VDI-Verlag, Series 17, No. 93, or by Thomas Brand in "Analysis and Optimization of Psychophysical Procedures in Audiology", (Oldenburg: Library and Information System of the University, 2000 - 148 pp., Oldenburg, Diss., Univ., 1999, ISBN 3-8142-0721-1). According to that method, a person I is exposed to an acoustic signal A which can be varied in a generator 1 in terms of its spectral composition and its transmitted sound pressure level. The person I analyzes i.e. "categorizes" the acoustic signal A just heard by means of an input unit 3 within for instance eleven loudness steps or categories as illustrated in fig. 1. These steps are assigned numerical weights for instance from 0 to 10 categorical units (cu).

Please replace the second full paragraph on page 6 with the following replacement paragraph:

> In fig. 2 the loudness L, registered by category scaling per fig. 1, is expressed as function of the mean sound pressure level in dB-SPL for a sinusoidal signal of frequency f_k. As is evident from the pattern in fig. 2, the loudness [[K_{kN}]] L_{kN} of the standard in the graph chosen increases in nonlinear fashion with the signal level; in a first approximation the slope for persons with normal hearing is expressed for all critical bands by the regression line indicated as N in fig. 2 with a gradient α_N in [categories per dB-SPL].

Please replace the last full paragraph on page 6 with the following replacement paragraph:

It is quite evident from this illustration that the model parameter α_N corresponds to a nonlinear amplification which for persons with normal hearing is approximately the same in each critical frequency band, whereas for hearing-impaired persons the determination must be made using [[α_{kT}]] $\underline{\alpha_{kl}}$ for each frequency or frequency band.

Please replace the first full paragraph on page 7 with the following replacement paragraph:

The straight line with the gradient [[α_{kT}]] $\underline{\alpha_{kl}}$ serves to approximate the nonlinear loudness function at frequency f_k by means of a regression line.

Please replace the second full paragraph on page 7 with the following replacement paragraph:

In fig. 2, [[L_{kT}]] $\underline{L_{kl}}$ indicates the typical pattern of loudness [[L_T]] $\underline{L_l}$ of a hearing-impaired person at a frequency of f_k.

Please replace the third full paragraph on page 7 with the following replacement paragraph:

A comparison of the curves L_{kN} and [[L_{kT}]] $\underline{L_{kl}}$ shows that the curve of a hearing-impaired person displays a greater offset (L_o) relative to zero and has a steeper slope than the standard curve. The greater offset corresponds to a higher audible limit or hearing threshold; the phenomenon of the invariably steeper loudness curve is referred to as loudness "recruitment" or acquisition and reflects a higher α-parameter.